UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,383	07/24/2003	James L. Kroening	P1905US00	9803

116   7590   04/06/2009
PEARNE & GORDON LLP
1801 EAST 9TH STREET
SUITE 1200
CLEVELAND, OH 44114-3108

EXAMINER
PATEL, KAUSHIKKUMAR M

ART UNIT	PAPER NUMBER
2188	

MAIL DATE	DELIVERY MODE
04/06/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/626,383	KROENING, JAMES L.
	Examiner	Art Unit	
	Kaushikkumar Patel	2188	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 January 2009*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *23-46* is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *23-46* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All   b)☐ Some * c)☐ None of:

　　　1.☐ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____ .
5)☐ Notice of Informal Patent Application
6)☐ Other: _____ .

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 28, 2009 has been entered.

Response to Amendment

2.   This Office Action is in response to the Applicant's communication filed January 28, 2009 in response to PTO Office Action mailed October 02, 2008. The Applicant's remarks and amendments to the claims and/or the specification were considered with the results that follow.

3.   In response to the last Office Action, claims 23, 30, 35, 38 and 41have been amended. Claim 46 has been added. Claims 1-22 have been previously canceled. As a result, claims 23-46 remain pending in this application.

Response to Arguments

4.   Applicant's arguments with respect to claims 23-45 have been considered but they are not fully persuasive.

Applicant argues that claims 1-22 were canceled and the office does not require or even want applicants to respond to the rejection of canceled claims and newly added claims do not recite all of the same features as previously pending claims, which were canceled. The Examiner agrees with the fact that office does not require to respond the canceled claims, however the Examiner respectfully disagrees with the fact that previously canceled claims do not recite the same features as newly added claims. As noted by the applicant, claims 1-22 were canceled on June 06, 2008 and the canceled claim 2 recited the following limitation: "The method of claim 1, further comprising: downloading a utility, wherein the utility performs the copying". The newly added claim 24 recited the limitation: "The method of claim 23, further comprising: downloading a utility, wherein the utility performs the copying". According to the Examiner's interpretation the newly added claim 24 recites the same limitation as previously canceled claim 2 and if the applicant disagrees with the examiner's interpretation of the scope of the newly added claim 24 then the examiner asks the applicant to show the support for different interpretation of new claim in the originally filed disclosure. Thus, the examiner noted that the noticed facts were admitted prior art.

Applicant argues that Maffezzoni does not disclose or suggest the features of the claimed invention because Maffezzoni makes backup copy stored in the second (hidden) partition but the backup copy is not taken from hidden partition. The examiner respectfully disagrees with the fact. Maffezzoni teaches (col. 7, lines 9-15): "the operating system stored on the first partition of the hard drive is restored with the copy of the operating system stored on the hidden partition". Here it is clear that the operating

system is copied from hidden (e.g. second) partition to first (user) partition. It is also

noted that the rejections of the claim is 35 U.S.C. 103 (a) and Maffezzoni teaches

making backup copy of the first partition into the second partition, and similarly if the

second partition contains data that is not stored/available in the first partition then it

would have been obvious to copy data from the second partition to first partition or vice

versa because the main purpose of Maffezzoni is to make two copies of the data in the

single hard disk using partitions, thus it is readily apparent to one having ordinary skill in

the art to make two copies of the data in the one disk. It is also noted that the applicant's

disclosure expressly fails to teach what type of contents are stored in the protected

area. The specification discloses that "the HPA 141 is a reserved area for data storage

outside the normal operating and file systems. This area is hidden from the operating

system and file system and is normally used for specialized applications" (page 5, lines

14-16). To the best knowledge of the Examiner the specialized applications may be the

information required to operate the disk drive and is used by the operating system,

therefore the same information must also be present in the user area otherwise the

operating system can not access it. The protected area can also be used for storing

software such as virus scan and other device drivers and operating system files,

however such information must also be present in the user area otherwise the operating

system can not control the functions because during normal operation, the protected

area is not accessible to the operating system. Maffezzoni teaches copying contents of

first partition to second partition (e.g. hidden partition) because originally hidden

partition does not contain information from the first partition, however as taught by

Maffezzoni, it is apparently clear that if the hidden partition contains data, then one can

obviously make copy to another partition. Maffezzoni further discloses that there can be

more than two backup copies (e.g. at another location) so that data can be restored in

case of physical crash of the hard disk.

Applicant further argues that Whiting does not disclose or suggest copying

contents of protected area of the first storage device to user area of first storage device,

however it is noted that Whiting is not relied upon to teach copying contents of protected

area to user area, but instead is relied upon to teach saving/backing up data into

respective directories.

Applicant further argues that APA does not teach restoring a protected area

directory from a first storage device to user area of a second storage device. The

Examiner respectfully disagrees with the fact. It is initially noted here that according to

MPEP § 2111, the USPTO personnel must give their broadest reasonable interpretation

to the claimed language and as noted above the protected area directory can be

interpreted as any directory that contains the data and as taught by Whiting the backup

directory and any sub-directory can be broadly interpreted as protected area directory

and APA teaches restoring data from second storage device to user area of first storage

device, which can include any data or directory because the remote storage device

does not store protected area directory into protected area of the remote storage device

and therefore the data stored in the user area can be restored in user area of the first

storage device. It is further noted that the second storage device (e.g. remote) stores

data in user area and as noted above APA teaches restoring the data from second

storage device to user area and Kawano teaches making backup copy of user area into protected area thus the data restored from remote device and backed up into protected area as taught by Kawano can be considered as protected area data and as taught by Whiting the respective data can be stored into respective backup directories, thus the combination of APA, Kawano and Whiting does teach the limitations of claims 33 and 35.

It is further noted that the rejections of claims are 35 U.S.C. 103 (a) rejection and all the references do not have to teach all the limitations, as such with regards to limitations of claim 34, Maffezzoni is not relied upon to teach restoring data from one storage device to other storage device, but instead Maffezzoni is relied upon to teach creating protected area in the storage device and the restoring data is taught by the combination of APA and Kawano.

Admitted Prior Art

5.   Applicant has not traversed the Examiner's assertion of Official Notice with regard to the rejection of claim 2 (now claim 24) in the previous office action, therefore the well-known facts presented in these rejections are taken to be admitted prior art. These facts are summarized as follow: Downloading the utilities via a network or the internet is well known in the art.

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

7.   <u>Claims 23-28 and 30-32 are rejected under 35 U.S.C. 103(a) as being</u>

<u>unpatentable over Maffezzoni (US 6,901,493).</u>

As per claims 23 and 30, Maffezzoni teaches a method and computer readable

media (claim 10) of creating a backup copy of data comprising:

booting to a protected (hidden or second partition) area of a first storage device

(Maffezoni, fig. 2, item 106, fig. 4, item 106b; col. 5, lines 48-50);

copying contents of the protected area (hidden partition) of a first storage device

to a user area (first partition) of the first storage device (Maffezzoni, fig. 4, item 106d,

col. 7, lines 9-12 and lines 39-44);

booting to the user areas of a first storage device (Maffezzoni, fig. 5, item 108g);

and

saving user area to a second storage device (Maffezzoni, col. 8, lines 13-18' "if

desired, more than one backup location may be used to store selected data copied from

hard drive").

Maffezzoni teaches saving selected data to a storage resource connected to the

Internet (Maffezzoni, col. 8, lines 15-20) but expressly fails to teach copying both

protected area and user area to another disk. However, Maffezzoni teaches that if there

is a physical crash of the hard disk then data can not be recovered from the remote

backup location (Maffezzoni, col. 8, lines 15-27; "it will be apparent to those skilled in

the art that use of second partition of the hard drive as backup location may result in

data loss in the event of a physical crash"), accordingly, it would have obvious to one

having ordinary skill in the art at the time of invention to back up the user data as well as

protected area (e.g. selected data that stored in hidden partition and restored in the user

area, as well as other data stored in the first partition or user partition) to second

storage device so that data can be retrieved in case of physical damage to hard disk

(Maffezzoni, col. 8, lines 15-27 and also see present application specification page 2,

lines 19-25).

As per claims 24 and 31, Maffezzoni teaches the backup program performing

copying function (Maffezzoni, col. 4, lines 51-54). Maffezzoni fails to teach downloading

the utility as required by the claim, but downloading utility software via a network or

internet is known in the art and Examiner takes official notice of the fact, because

keeping software centrally at one place and then distributing or downloading to client

computers makes upgrading and maintenance of the software more efficient and

reliable.

As per claims 25 and 26, Maffezzoni teaches that the user area of the storage

devices are saved to the second storage devices directly connected to electronic device

or indirectly connected, e.g. attached to the backup server (Maffezzoni, col. 5, lines 11-

35).

As per claim 27, Maffezzoni teaches booting to protected area (Maffezzoni, col. 5, lines 48-50).

As per claim 28, Maffezzoni teaches rebooting to user area after the copying and before the saving (Maffezzoni, col. 8, lines 6-9).

Claims 32 is combination of claims 27 and 28 thus claim 32 is rejected under same rationales as applied to claims 27 and 28 above.

8.   Claims 29 and 38-45 are rejected under **35 U.S.C. 103(a)** as being unpatentable over Maffezzoni (US 6,901,493) as applied to claim 23 above and further in view of Whiting et al. (US 2002/0107877).

As per claim 29, Maffezzoni fails to teach a directory for storing the data from protected area of the storage device, Whiting however teaches backup directory for storing backup data in the storage device (Whiting, figs. 2 and 3, pars. [0033] – [0035]). It would have been obvious to one having ordinary skill in the art at the time of the invention to provide directory for backup data as taught by Whiting in the system of Maffezzoni for easy management of data because directories and folders allows grouping of similar data and thus data can be easily managed.

As per claim 38, Maffezzoni teaches a backup server comprising:

a backup storage device (col. 5, lines 20-35);

a read utility to be executed at an electronic device (col. 4, lines 51-54, it is inherent to have an electronic device (computer) to accommodate the hard disk).

Maffezzoni fails to teach downloading the utility as required by the claim, but downloading utility software via a network or internet is known in the art and Examiner takes official notice of the fact, because keeping software centrally at one place and then distributing or downloading to client computers makes upgrading and maintenance of the software more efficient and reliable.

Maffezzoni further teaches wherein the read utility is to copy contents of a protected area (hidden partition) of a storage device to a user area (first partition) of the storage device (Maffezzoni, fig. 4, item 106d, col. 7, lines 9-12 and lines 39-44), and wherein the read utility is further to save a backup copy to the backup storage device (Maffezzoni, col. 8, lines 13-18' "if desired, more than one backup location may be used to store selected data copied from hard drive").

Maffezzoni teaches saving selected data to a storage resource connected to the Internet (Maffezzoni, col. 8, lines 15-20) but expressly fails to teach copying both protected area and user area to another disk. However, Maffezzoni teaches that if there is a physical crash of the hard disk then data can not be recovered from the remote backup location (Maffezzoni, col. 8, lines 15-27; "it will be apparent to those skilled in the art that use of second partition of the hard drive as backup location may result in data loss in the event of a physical crash"), accordingly, it would have obvious to one having ordinary skill in the art at the time of invention to back up the user data as well as protected area (e.g. selected data that stored in hidden partition and restored in the user area, as well as other data stored in the first partition or user partition) to second storage device so that data can be retrieved in case of physical damage to hard disk

(Maffezzoni, col. 8, lines 15-27 and also see present application specification page 2,

lines 19-25).

Maffezzoni fails to teach a controller and a directory for storing the data from

protected area of the storage device, Whiting however teaches a controller (Whiting,

par. [0002]) and backup directory for storing backup data in the storage device (Whiting,

figs. 2 and 3, pars. [0033] – [0035]). It would have been obvious to one having ordinary

skill in the art at the time of the invention to provide controller to control the storage

operation and directory for backup data as taught by Whiting in the system of

Maffezzoni for easy management of data because directories and folders allows

grouping of similar data and thus data can be easily managed.

Claims 39 and 40 are rejected under same rationales as applied to claims 27 and

28 above.

As per claim 41, Maffezzoni teaches a controller to download the directory from

the backup storage device to the user area of the storage device (here Maffezzoni

teaches restoring data from backup storage to hard drive of the computer system, col.

5, lines 20-35, teaches backup storage device and col. 5, lines 58-60 teaches restoring

the directory from backup device to appropriate partition of the hard disk, where it is

apparent that storage devices includes controller);

a create utility to be downloaded and executed at the electronic device, wherein

the create utility is to create the protected area on the storage device (col. 6, lines 3-30,

teaches defining hidden partition on the disk, where it is inherent to have utility to define

hidden partition).

Claims 42-45 are rejected under same rationale as applied to claims 38-41 above.

9.   <u>Claims 33 and 46 are rejected under **35 U.S.C. 103(a)** as being unpatentable over Applicant's Admitted Prior Art (APA herein after), Kawano et al. (US 2003/0229768) (Kawano herein after).</u>

As per claim 33, restoring a protected area directory from a first storage device to a user area of a second storage device (APA teaches saved contents can be restored to the electronic device (e.g. data can be restored from back up storage (first storage) to the storage connected to the device (second storage) (APA, page 2, lines 27-28) and also as per APA operating system is unable to access the HPA, thus APA inherently teaches restoring the data in user space of the second (attached to device) storage. It is further noted that restoring protected area directory means any directory containing data can be restored from remote storage device to local storage device as taught by APA).

APA fails to teach copying protected area directory (data) from the user space of second storage to protected area of the second storage. Kawano teaches the data/directory in the user area is copied to protected area (paragraph [0039]). It would have been obvious to one having ordinary skill in the art at the time of the invention to have modified the restoring method of APA by the teachings of Kawano so that the data can be protected from viruses and system can be recovered without using removable disks or storage devices (Kawano, paragraph [0008]).

As per claim 46, APA and Kawano teach booting to the protected area of the first

storage device (Kawano, par. [0042], taught as BIOS boots the special operating

system from PARTIES partition and pars. [0016] and [0045], data/information is passed

between partitions).

10.   Claim 34 is rejected under **35 U.S.C. 103(a)** as being unpatentable over

Applicant's Admitted Prior Art (APA herein after) and Kawano et al. (US 2003/0229768)

(Kawano herein after) as applied to claim 33 above and further in view of Maffezzoni

(US 6,901,493).

APA and Kawano fail to teach creating protected area before copying the

contents. Maffezzoni teaches creating protected area before copying (Maffezzoni, fig. 3,

item 104a). It would have been obvious to one having ordinary skill in the art at the time

of the invention to create protected area on the hard disk as taught by Maffezzoni in the

system of APA and Kawano to backup data into hidden (protected) partition to avoid

accidental deletion of important data (Maffezzoni, col. 6, lines 10-12) and to restore data

in case of logical crash of hard disk partition (Maffezzoni, col. 5, lines 40-41).

11.   Claims 35-37 are rejected under **35 U.S.C. 103(a)** as being unpatentable over

Kawano et al. (US 2003/0229768) (Kawano herein after), Maffezzoni (US 6,901,493)

and Whiting et al. (US 2002/0107877).

As per claim 35, Kawano teaches an electronic device (fig. 1, par. [0031], taught

as computer system) comprising:

a first storage device configured to store first contents in a protected area, store a

copy of said first contents in a user area and store second contents in the user area

(Kawano, par. [0032], hard disk drive 11 has user area and PARTIES partition and both

partitions store copies of the data stored in each other).

Kawano fail to teach a directory for storing the data, Whiting however teaches

backup directory for storing backup data in the storage device (Whiting, figs. 2 and 3,

pars. [0033] – [0035]). It would have been obvious to one having ordinary skill in the art

at the time of the invention to provide directory for backup data as taught by Whiting in

the system of Kawano for easy management of data because directories and folders

allows grouping of similar data and thus data can be easily managed.

Kawano further teaches a processor (inherent in computer system) configured to

boot to either the user area of the first storage device or the protected area of the first

storage device (Kawano, par. [0043]);

wherein the storage device (fig, 1, item 11), comprises instructions, which when

executed on the processor (par. [0029] and [0030]) comprise:

booting to the protected area and copying contents of the protected area of the

first storage device to the directory (Whiting teaches a backup directory) designated for

said first contents within user area of the first storage device (par. [0042], taught as

BIOS boots the special operating system from PARTIES partition and pars. [0016] and

[0045], data/information is passed between partitions);

booting to the user area of a first storage device (Kawano, par. [0043]).

Kawano and Whiting fail to teach saving user area to a backup storage device.

Maffezzoni teaches copying data to multiple areas (partitions) of the hard disk such that

if one of the multiple partitions is damaged, the system remains operational from other

partition of the same hard disk and Maffezzoni also teaches backing up data to another

storage device, because in case of physical damage to entire disk, data is restored from

second storage device (Maffezzoni, col. 3, lines 13-22, col. 8, lines 12-27). It would

have been obvious to one having ordinary skill in the art at the time of invention to back

up the user/protected area data to second storage device as taught by Maffezzoni in the

system of Kawano and Whiting, because data can be retrieved in case of physical

damage to the first storage device (Maffezzoni, col. 8, lines 12-27).

Kawano, Whiting and Maffezzoni fail to teach copying both protected area and

user area to another disk, but Maffezzoni teaches that if there is a physical crash of the

hard disk then data can not be recovered from the hard disk (Maffezzoni, col. 8, lines

15-27), accordingly, it would have obvious to one having ordinary skill in the art at the

time of invention to back up the user data as well as protected area to second storage

device so that the data can be retrieved in case of physical damage to hard disk

(Maffezzoni, col. 8, lines 15-27 and also see present application specification page 2,

lines 19-25).

Maffezzoni also teaches a second storage device as explained above

accordingly Maffezzoni teaches communication means for communicating to and from a

second storage device.

As per claim 36, Kawano teaches booting to the protected area prior to the copying and rebooting to user area after the copying and before saving (par. [0043]).

As per claim 37, Kawano teaches storing software modules on different storage devices or on network system (par. [0030]). It would have been obvious to one having ordinary skill in the art at the time of the invention to downloaded software from different storage device (network) to be executed by computer system to achieve the functionality of Kawano and communication means are inherent in the network.

Conclusion

12.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kaushikkumar Patel whose telephone number is (571)272-5536. The examiner can normally be reached on 7.30 am - 4.00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung Sough can be reached on 571-272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Hyung S. Sough/   Kaushikkumar Patel
Supervisory Patent Examiner, Art Unit 2188   Examiner
04/01/09   Art Unit 2188

/kmp/